Hamlet

2BAY RAID SYSTEM USB 3.0 DESKTOP

RAID Enclosure for Two 3.5” SATA Hard Drives

USER MANUAL

HXDAS35

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We inform You this product is manufactured with materials and components in compliance with RoHS Directive 2011/65/EU (2002/95/CE); WEEE Directive 2002/96/CE, 2003/108/CE Italian Legislative Decree 2005/151 and EMC Directive 2004/108/EC for the following standards:
EN 55022: 2010
EN 61000-3-2: 2006 + A1: 2009 + A2: 2009
EN 61000-3-3: 2008
EN 55024: 2010

CE

The complete CE declaration of conformity of the product can be obtained by contacting Hamlet at info@hamletcom.com.
The information on the importer for your country can be found in the "About Us" section of the Hamlet website at www.hamletcom.com.

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Introduction

Features

- Supports JBOD, RAID0,RAID1,Normal mode
- Enhanced data protection and high-performances storage
- Support with USB3.0 high speed reach up to 5.0Gbps
- Supports Plug-play and Hot-plug
- Support mode select by RAID switch

Specifications

- Inner Interface: SATA
- Outer Interface: USB3.0
- Date Transfer rate: Support USB 3.0 super-speed (5Gbps)
- Complies with USB 2.0 high speed (480Mbps), USB 1.1 Low speed (1.5Mbps)
- Suitability: 2 x 3.5" SATA HDD
- Supports Plug-play and Hot-plug
- Power Supply: AC 100~240V, 50~60Hz ; DC 12V, 2.5A
- Material: aluminum and plastic
- Cooling Fan: One 25x25mm Cooling Fan
- OS Compatibility: Windows XP/Vista/7/8, Linux and Mac OS 10.4 or above
- Dimension: 200 x 120 x 68 mm (L x W x H)

System Requirements

- Minimum Pentium II/50MHz or Apple G4 processor
- Minimum 64MB RAM
- Windows XP/VISTA/7/8, Mac OS 10.4 and above
- One available USB port

Supported Hard Drives

- One or two 3.5" SATA I/II hard drives (1.5/3.0 Gbps)
- Capacity up to 2TB or more
- Hard drives of identical capacities are recommended
- Supports large volumes in excess of 3TB

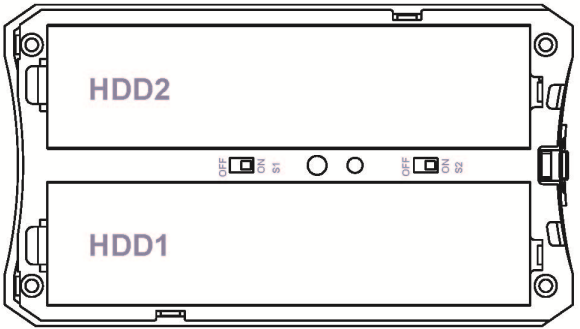
Package Contents

- Dual bay enclosure 3.5”
- USB 3.0 cable
- Power supply
- Manual

Setting the RAID Mode

RAID (Redundant Array of Independent Disks) is a set of technology standards for teaming disk drives to improve fault tolerance and performance.
The RAID mode should be set before installing the drives and then first formatting the drives.

1. Make sure the power is off.
2. Set the RAID switch and select your preferred RAID mode. There have 2 mode switch in the inner of the product, it can form 4 kinds of different ways through these 2 switches, it can realize 4 kinds of different functions as below.



S1/S2=ON/ON, Normal Mode
S1/S2=ON/OFF, JBOD Mode
S1/S2=OFF/ON, RAID-0 Mode
S1/S2=OFF/OFF, RAID-1 Mode

3. Install the hard drives and replace the front panel, then turn on the power.
4. Format the drives.

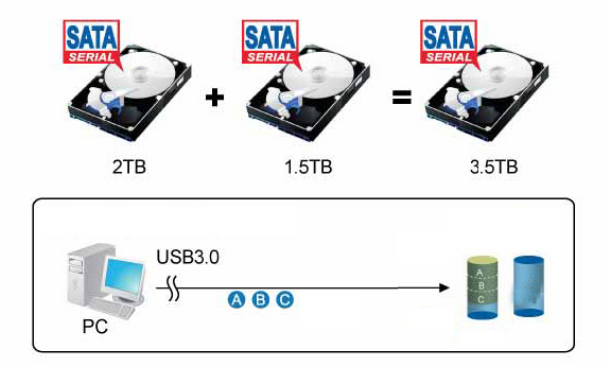
Note: Changing the RAID mode will require you to re-format the drivers. Make sure to backup all existing data first.

Normal Mode (Non-Raid)

Normal mode is the default setting of HDD enclosure and will not use any RAID mode. In Normal condition, both of the two hard disk mode inside the enclosure are in independent operation state, and also will be identified as the two separate hearts in the system, users can choose any hard drive for storing files. If one piece of hard disk is damaged, the other piece of hard disk data would not be influenced.

BIG Mode (JBOD/Spanning)

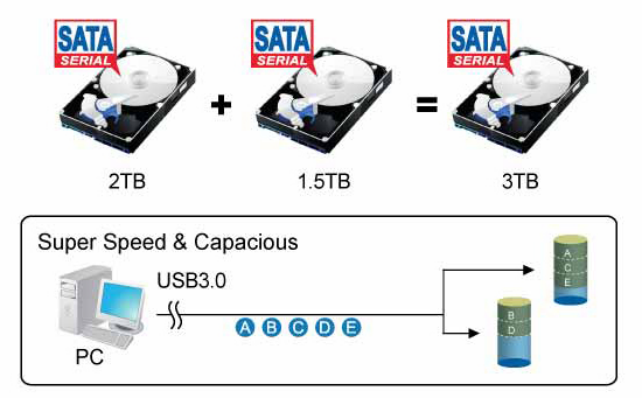
In JBOD mode two hard disk will simply be bound for one, the merger hard drive performance will be same as single hard disk. The total capacity of the portable hard disk equal to the sum of two hard drive capacity. In this mode the system starts to storage from the first disk and switches to the second hard drive when the storage space of the first disk is. If one of the two HDDs appears damaged, then all of the data in the two hard disk will be lost.



FAST Mode (RAID 0/Striping)

FAST mode it's also our familiar RAID 0 mode. In RAID 0 state, data storage is divided into two parts, respectively in two hard disk storage, then the theory storage speed of hard disk is twice the one of single block hard disk.

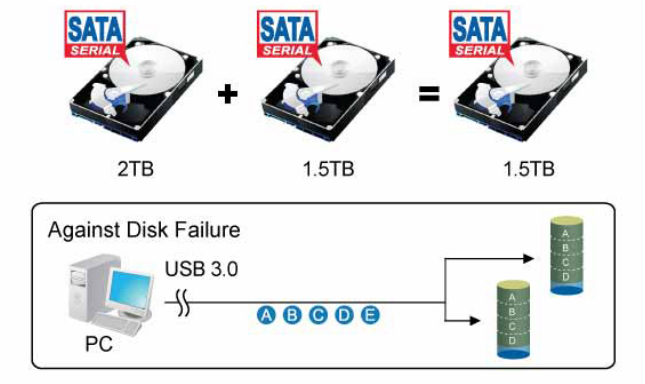
The actual capacity equals to twice the smaller capacity of the one hard drive (between the two hard disk). The deficiency of RAID 0 is that any piece of hard disk is failure, the whole RAID on data will not be restored.



SAFE Mode (RAID 1/Mirroring)

Safe mode is also known as RAID 1. In this state two hard drives are closely mirrored. The actual capacity of portable hard drive equals to the smaller capacity one, storage speed is same.as a single block of hard disk. The advantage of RAID 1 lies that any piece of hard disk stored data losing, others can not lose, its weakness is the capacity loss of hard drive is bigger.

For this reason the RAID 1 mode is the ideal storage solution for very important material such as databases or personal data.

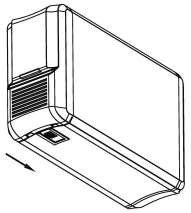


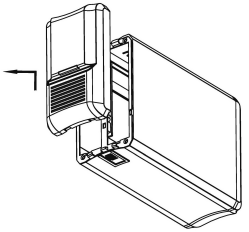
System Setup

Hard Drive Installation

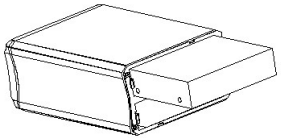
The drives can be installed at any position, there is no specific order required.

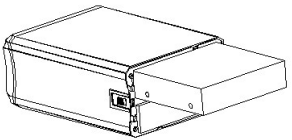
1. Unlock the switch at the bottom of the case and lift the front panel upward and away from the housing to remove it.



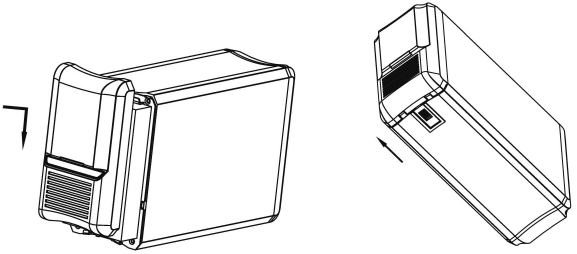


2. Install the hard drives as illustrated below with the top of the drives, where the label is located, facing each other. Push the drives lightly into place.





3. Set your preferred RAID mode and then replace the front panel.



Connect to computer

1. Connect one end (type B) of the USB cable into the type B USB port of your HDD enclosure.
2. Connect the other end of the USB cable (type A) into any active USB port of the computer.
3. Connect Power supply to the enclosure and power up the enclosure.
4. Let OS search and install the driver automatically.
5. Use the disk management tool (PC) or disk utility (Mac) to create a new partition and format the drives.
6. Open “My Computer” to see your external hard drive ready to use.

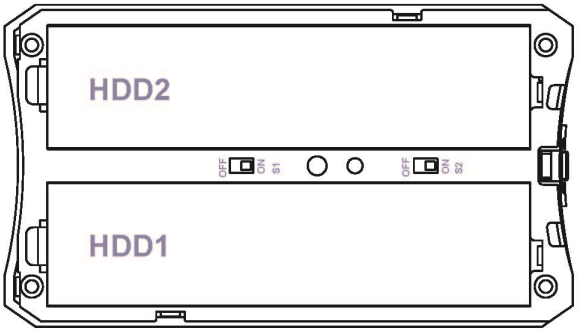
Note:
To enjoy USB 3.0 super speed up to 5Gbps, your computer must be equipped with built-in USB 3.0 ports or a USB 3.0 host PCI-e card.

It is not possible to add more drives to an existing RAID array without re-formatting it. When adding additional drivers at a later point, they will only be detected after the device has been restarted and the drivers have been re-formatted.

Replacing Hard Drives

When one drive fails, the HDD LED will display below state:

1. If HDD1 Fails: Every 3 seconds LED flash once when power on.
2. If HDD2 Fails: LED off.



If one drive fails and the RAID mode is set to RAID0 or JBOD, the data will be lost and the system can not be accessed again until the drive have been replaced.

1. Check the HDD LED state and replace the faulty drive. The power must turn off when replacing the drive.
2. For RAID 0 and JBOD, restart the system and then format the drives again.
3. For Non-RAID (Normal Mode), simply format the new drive.

FAQs

Can I use external USB hub?
Yes, USB hub works in the same way as the computer USB ports.

My computer doesn't have USB 3.0 port, can I use USB 3.0 host adaptor?
USB 3.0 host adapter works in the same way as the built-in USB ports.

What file system should I choose to format my drive?
This will depend on how you want to use the drive but in general, we recommend:

- Windows XP/VISTA/7 → NTFS
- Mac OS X → HFS+ (Mac OS Extended)
- To use it on both PC and Mac → FAT32 (single file size is limited to 4GB)

How many drives can fail before I loose my data?
For RAID 0 and JBOD, any drive failure will result in the data being lost. For RAID 1, more than one drive failure at the same time will mean the data can not be recovered anymore. For Non-RAID, only the data on the defective drive will be lost.